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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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		EXAMINER		
		TUGBANG, ANTHONY D		
		ART UNIT		PAPER NUMBER
		3729		
DATE MAILED: 08/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,556

Applicant(s)

SLEZAK, ARNOLD G.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-33 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 and 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/31/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1, 3, 5-9 and 21-24, in the reply filed on 5/31/05 is acknowledged. The traversal is on the ground(s) for at least three reasons. This is not found persuasive because of the following.

Groups I and II

Applicant(s) assert the reasons for distinctness between Groups I and II is erroneous to the extent that rotating of the discs requires a shear force. The examiner traverses in that Group II, patentability of the invention is relied upon with respect to the final structure of the disc stack, not how the disc stack is made. See MPEP § 2113. So while a rotary shear force could be used to provide concentric alignment of the first disc and the second disc in the invention of Group II (at least Claim 25), no rotary shear force or rotating of any disc is required in the step of biasing (i.e. "biasing...discs", lines 6-8 of Claim 1) of Group I. In Group I, biasing can occur without any rotary shear force or without any rotation, to provide a concentric alignment. Thus, Groups I and II are materially different and distinct.

Group I and III and Groups II and III

Applicant(s) assert that the reasons for distinctness between Groups I and III and Groups II and III, respectively, are erroneous because the examiner has misconstrued the claim language. The examiner has not misconstrued the claim language. In Group III, Claim 30 explicitly recites that the disc stack is formed "for stacking two or more discs with prewritten servo information on the motor", which is the basis for the restriction requirement in these groups since neither one of Groups I and II recite this feature at all. While the specification does mention that the

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prewritten servo information is taken from the discs themselves, Claim 30 requires no such feature. So Claim 30 appears to contradict what the specification encompasses. If applicant(s) wish to have Claim 30 agree with the specification, then the claim will have to be amended accordingly.

Furthermore, Claim 30 is not a linking claim since it requires the feature of having prewritten servo information on the motor, and this is nowhere recited in any of the claims of Groups I and II.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 25-33 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/31/05.

3. Claims 10-20 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/18/04.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 1-9 and 21-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In Claim 1, the recitation of “a common angular reference axis” of each disc (line 3) is new matter. The specification and drawings, as originally filed, does nor provide any support for the feature of each disc having a common angular reference axis. The specification does not even define what is meant by “a common angular reference axis of each disc”.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 1, 3, 5-9 and 21-24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, it is unclear from the disclosure what is meant by the phrase of “common angular reference axis” (line 3) of each disc.

With respect to Claim 21, since it is unclear from the disclosure what is meant by the common “angular reference axis” (line 3), even further confusion is raised as to how the first and second indicia can each have a first line that is coextensive with any such common angular reference axis and a second line angularly disposed from the first line.

NOTE: No art rejections have been applied to Claims 21-24 since there are a great deal of confusion and uncertainty as to the proper interpretation of the limitations of claims.

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Therefore, it would not be proper to reject such claims on the basis of prior art. See MPEP 2173.06.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroba et al 6,081,990.

Kuroba discloses a method comprising: placing prewritten discs 20, each characterized by servo tracks that are offset in relation to a common angular reference axis around a motor hub (spindle 21), the prewritten discs placed with respect to each other disposing the angular references axes symmetrically around the motor hub; and biasing each disc in a direction of the respective angular reference axis to concentrically align the servo tracks of a first disc of the prewritten discs with the servo tracks of a second disc of the prewritten discs (see various embodiments of Figures 1a, 4, 7a, 7b, 8a and 8c).

The term “biasing” is read as the effect of balancing the disc, or movement of the disc, necessary for balancing the discs on the hub during assembly of the disc drive (see col. 8, lines 31+). The “common angular reference axis” for each disc can be read as any axis along each disc used in biasing or balancing the disc as the servo tracks will be offset in relation to this “common angular reference axis”.

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Regarding Claim(s) 7, Kuroba further teaches a reference mark 22 that can be read as the “indicia”

Regarding Claim(s) 3, Kuroba further teaches that biasing includes pressingly engaging each disc, which would include an edge of each disc against the motor hub.

Regarding Claim(s) 5, because Kuroba teaches first and second discs that are biased, the biasing or balancing forces for each disc has “different nonopposite directions” because each disc can have more than one reference axis (marks 22) and thus, have different common angular reference axes disposed.

Regarding Claim(s) 9, Kuroba further teaches that the angular reference axis can comprise of a first indicia and a second indicia (see col. 6, lines 65+), i.e. more than one reference mark 22, in which the second indicia is different from the first indicia because each are at different locations. The first and second indicia of Kuroba can be said to be on different sides of the disc to the same extent that the applicant’s first and second indicia are on different sides of the disc.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroba et al.

Kuroba discloses the claimed manufacturing method as relied upon above, further including that the first and second discs are biased with a balancing force from different directions or angles (see col. 8, lines 31+). Kuroba does not necessarily mention that the first and second disc can each be biased in “substantially opposite directions”. However, to bias or balance the first and second disc from an opposite direction is considered to be an effective variable within the level of ordinary skill in the art of assembling discs onto a motor hub. To bias the first and second discs from different directions, including “substantially opposite directions”, are necessary to balance the discs on the motor hub for proper operation of the disc drive or disc assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Kuroba by biasing the first and second discs from substantially opposite directions, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuroba by biasing the first and second discs from substantially opposite directions to achieve proper operation of the disc drive.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroba et al in view of JP'442.

Kuroda discloses the claimed manufacturing method as relied upon above in Claim 1. Kuroda does not mention that the angular reference axis includes a laser index mark.

JP'442 teaches that an angular reference axis (inner surface of discs) can include a laser index mark 12 to advantageously have quality information on the disc itself (see PURPOSE).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the angular reference axis of Kuroda by including the laser index mark, as taught by JP'442, to positively provide quality information in the disc itself.

Response to Arguments

13. Applicant's arguments (noting pages 14 and 15 of the response filed on 1/31/05) with respect to claims 1, 3, 5-9 and 21-24 have been considered to be met and inclusive in view of the rejections set forth above, particularly noting the remarks as to how Kuroba et al teach the "common angular reference axis".

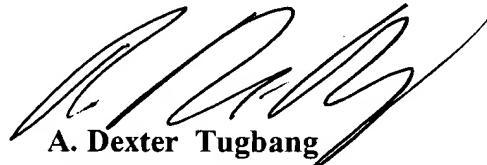
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

August 18, 2005